IN THE CLAIMS:

1. (Original) A method of forming a composite tungsten film, comprising:

sequentially depositing tungsten nucleation layers and tungsten bulk layers on a substrate to form a composite tungsten layer, wherein each of the tungsten nucleation layers and the tungsten bulk layers have a thickness less than about 300 Å.

2. (Original) The method of claim 1 wherein each of the tungsten bulk layers has a thickness within a range of about 150 Å to about 250 Å.

3. (Original) The method of claim 1 wherein each of the tungsten nucleation layers has a thickness within a range of about 15 Å to about 50 Å.

4. (Original) The method of claim 1 wherein the composite tungsten film has a thickness within a range of about 500 Å to about 3000 Å.

5. (Original) The method of claim 1 wherein each of the tungsten nucleation layers is deposited by alternately adsorbing a tungsten-containing precursor and a reducing gas on the substrate.

6. (Original) The method of claim 5 wherein the tungsten-containing precursor is selected from the group consisting of tungsten hexafluoride (WF_6) and tungsten carbonyl ($W(CO)_6$).

7. (Original) The method of claim 5 wherein the reducing gas is selected from the group consisting of silane (SiH_4), disilane (Si_2H_6), dichlorosilane ($SiCl_2H_2$), borane (BH_3), diborane (B_2H_6), triborane (B_3H_9), tetraborane (B_4H_{12}), pentaborane (B_5H_{15}), hexaborane (B_6H_{18}), heptaborane (B_7H_{21}), octaborane (B_8H_{24}), nanoborane (B_9H_{27}) and decaborane ($B_{10}H_{30}$).

8. (Original) The method of claim 5 wherein the tungsten nucleation layer is deposited at a temperature within a range of about 200°C to about 400°C.

9. (Original) The method of claim 5 wherein the tungsten nucleation layer is deposited at a pressure within a range of about 1 torr to about 10 torr.

10. (Original) The method of claim 1 wherein each of the tungsten bulk layers is deposited by thermally decomposing a gas mixture comprising a tungsten-containing precursor.

11. (Original) The method of claim 10 wherein the tungsten-containing precursor is selected from the group consisting of tungsten hexafluoride (WF_6) and tungsten carbonyl ($W(CO)_6$).

12. (Original) The method of claim 10 wherein the tungsten bulk layer is deposited at a temperature within a range of about 450°C to about 650°C.

13. (Original) The method of claim 10 wherein the tungsten bulk layer is deposited at a pressure within a range of about 10 torr to about 30 torr.

14. (Original) The method of claim 1 wherein the tungsten nucleation layers are deposited in a different process chamber than that used to deposit the tungsten bulk layers.

15. (Original) The method of claim 1 wherein the tungsten nucleation layers are deposited in the same process chamber used to deposit the tungsten bulk layers.

16. (Original) A method of forming a composite tungsten film, comprising:

sequentially depositing tungsten nucleation layers and tungsten bulk layers on a substrate to form a composite tungsten layer, wherein each of the tungsten nucleation layers is deposited by alternately adsorbing a tungsten-containing precursor and a

reducing gas on the substrate and wherein each of the tungsten bulk layers is deposited by thermally decomposing a gas mixture comprising a tungsten-containing precursor.

17. (Original) The method of claim 16 wherein each of the tungsten bulk layers has a thickness within a range of about 150 Å to about 250 Å.

18. (Original) The method of claim 16 wherein each of the tungsten nucleation layers has a thickness within a range of about 15 Å to about 50 Å.

19. (Original) The method of claim 16 wherein the composite tungsten film has a thickness within a range of about 500 Å to about 3000 Å.

20. (Original) The method of claim 16 wherein the tungsten-containing precursor is selected from the group consisting of tungsten hexafluoride (WF_6) and tungsten carbonyl ($W(CO)_6$).

21. (Previously presented) The method of claim 16 wherein the reducing gas is selected from the group consisting of silane (SiH_4), disilane (Si_2H_6), dichlorosilane ($SiCl_2H_2$), borane (BH_3), diborane (B_2H_6), triborane (B_3H_9), tetraborane (B_4H_{12}), pentaborane (B_5H_{15}), hexaborane (B_6H_{18}), heptaborane (B_7H_{21}), octaborane (B_8H_{24}), nanoborane (B_9H_{27}) and decaborane ($B_{10}H_{30}$).

22. (Original) The method of claim 16 wherein the tungsten nucleation layer is deposited at a temperature within a range of about 200°C to about 400°C.

23. (Original) The method of claim 16 wherein the tungsten nucleation layer is deposited at a pressure within a range of about 1 torr to about 10 torr.

24. (Original) The method of claim 16 wherein the tungsten bulk layer is deposited at a temperature within a range of about 450°C to about 650°C.

25. (Original) The method of claim 16 wherein the tungsten bulk layer is deposited at a pressure within a range of about 10 torr to about 30 torr.

26. (Original) The method of claim 16 wherein the tungsten nucleation layers are deposited in a different process chamber than that used to deposit the tungsten bulk layers.

27. (Original) The method of claim 16 wherein the tungsten nucleation layers are deposited in the same process chamber used to deposit the tungsten bulk layers.

28. (Previously presented) A method for forming a composite tungsten film for use in a memory cell, comprising:

providing a substrate structure, wherein the substrate structure comprises an insulating material, comprising, silicon oxide or silicon nitride, having at least one aperture formed therein; and

sequentially depositing tungsten nucleation layers and tungsten bulk layers, at least partially within the at least one aperture to form a composite tungsten layer, wherein the tungsten nucleation layers are deposited by alternately adsorbing a tungsten-containing precursor and a reducing gas on the substrate structure and wherein the tungsten bulk layers are deposited by thermally decomposing the tungsten-containing precursor.

29. (Original) The method of claim 28 wherein each of the tungsten bulk layers has a thickness within a range of about 150 Å to about 250 Å.

30. (Original) The method of claim 28 wherein each of the tungsten nucleation layers has a thickness within a range of about 15 Å to about 50 Å.

31. (Original) The method of claim 28 wherein the composite tungsten film has a thickness within a range of about 500 Å to about 3000 Å.

32. (Cancelled)

33. (Previously presented) The method of claim 28 wherein the tungsten-containing precursor is selected from the group consisting of tungsten hexafluoride (WF_6) and tungsten carbonyl ($W(CO)_6$).

34. (Previously presented) The method of claim 28 wherein the reducing gas is selected from the group consisting of silane (SiH_4), disilane (Si_2H_6), dichlorosilane ($SiCl_2H_2$), borane (BH_3), diborane (B_2H_6), triborane (B_3H_9), tetraborane (B_4H_{12}), pentaborane (B_5H_{15}), hexaborane (B_6H_{18}), heptaborane (B_7H_{21}), octaborane (B_8H_{24}), nanoborane (B_9H_{27}) and decaborane ($B_{10}H_{30}$).

35. (Previously presented) The method of claim 28 wherein the tungsten nucleation layer is deposited at a temperature within a range of about 200°C to about 400°C.

36. (Previously presented) The method of claim 28 wherein the tungsten nucleation layer is deposited at a pressure within a range of about 1 torr to about 10 torr.

37-38. (Cancelled)

39. (Previously presented) The method of claim 28 wherein the tungsten bulk layer is deposited at a temperature within a range of about 450°C to about 650°C.

40. (Previously presented) The method of claim 28 wherein the tungsten bulk layer is deposited at a pressure within a range of about 10 torr to about 30 torr.

41. (Previously presented) The method of claim 28 wherein the tungsten nucleation layers are deposited in a different process chamber than that used to deposit the tungsten bulk layers.

42. (Previously presented) The method of claim 28 wherein the tungsten nucleation layers are deposited in the same process chamber used to deposit the tungsten bulk layers.

43. (Previously presented) The method of claim 28 wherein the composite tungsten film is used for word or bit metallization, or both.

44. (Previously presented) The method of claim 28 wherein each of the tungsten bulk layers has a thickness of less than about 300 Å.

45. (Previously presented) The method of claim 16 further comprising:
depositing a dielectric layer on the substrate surface;
forming at least one aperture within the dielectric layer; and
depositing a barrier layer comprising titanium nitride (TiN) or tantalum nitride (TaN) on the dielectric layer prior to the sequentially depositing tungsten.

46. (Previously presented) The method of claim 45 wherein the composite tungsten film has a thickness within a range of about 500 Å to about 3000 Å.